

**REMARKS**

Claims 1-3 and 20-23 are pending. Claim 2 has been amended for clarification. Claim 20 remains withdrawn.

Examiner Interview

Submitted herewith is a Statement of the Substance of the Interview describing the April 26, 2007 telephone interview between the Examiner and Applicants' representative.

112, 2<sup>nd</sup> Paragraph, Rejections

Claims 1-3 and 21-23 stand rejected under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, as allegedly being indefinite. Applicants provide the following clarifying remarks.

Claim 1 describes a *variation in thickness* throughout the film's inorganic oxide layer, where the maximum thickness of this layer is equal to or less than 1.5 times the minimum thickness of this layer. See, e.g., the specification, page 4, line 25 – page 5, line 3.

Claim 2 describes the weight percent *range* that one component of the composite oxide in the film's inorganic oxide layer may have, where the difference between a maximum weight percent and a minimum weight percent is within 20 weight percent. See, e.g., the specification, page 6, lines 10-23. Claim 2 has been amended to correct a minor typographical error.

The rejections are believed to have been overcome. Withdrawal of the rejections is therefore requested.

103 Rejections

Claims 1-3 and 21-23 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Masuda (US 5,529,832) in view of Kobayashi (US 3,676,612). Applicants traverse the rejections.

Claim 1 is directed to a functional roll film comprising a plastic film and an inorganic oxide layer on at least one surface of the plastic film, where a controlled maximum thickness of the inorganic oxide layer is equal to or less than 1.5 times a

controlled minimum thickness of the inorganic oxide layer among layer thickness values measured along the length and the width of the film. Claim 23 is similarly so directed.

In contrast, Masuda discloses a film comprising two polyester surface layers, where the polyester surface layer is made of polyester resin that may incorporate inert fine particles that may be inorganic. See, e.g., col. 3, line 53 – col. 4, line 7; col. 5, lines 15-19, 30-45. Masuda further discloses that the amount of incorporated particles in one polyester surface layer is at most 1.5% by weight of small particles and 0.2% by weight of large particles. See, e.g., col. 5, lines 51-53; col. 6, lines 6-11, 26-31. Masuda also discloses that the amount of incorporated particles in the other polyester surface layer is at most 5% by weight. See, e.g., col. 7, lines 13-16.

The Office Action asserts that Masuda discloses an inorganic layer, as in Applicants' claimed invention. See Office Action, page 4, item 7. Applicants disagree for the following reasons. First, the particles are *incorporated* into the Masuda polyester layers, *not* disposed on the surface of the layers. Indeed, Masuda specifically discloses that incorporation of the particles is preferred in order to acquire the desired surface properties of Masuda's layers. See, e.g., Masuda, col. 5, lines 15-19, 46-50. Masuda neither teaches nor suggests disposing the particles on the surface of the layers, rather than into the layers. Whereas, Applicants' claimed inorganic layer is disposed on a surface of a plastic film. See, e.g., Applicants' claim 1.

Second, the amount of particles incorporated into Masuda's polyester layers is quite small, at less than 5% by weight. It is well-known that merely incorporating particles into a material does not make that material into the incorporated particles, particularly when the incorporated amount is so small with respect to the material, as in Masuda's layers. Therefore, in the case of Masuda's polyester layer, merely incorporating inert particles, e.g., inorganic particles, into the layer does not make the layer an inorganic one. Indeed, Masuda describes the layer by the predominant component, i.e., polyester. One skilled in the art knows that the polyester layer of Masuda is *not* an inorganic layer and can not reasonably be construed to be so.

The Office Action further asserts that Masuda discloses the claimed controlled variation in thickness of the inorganic layer of Applicants' claimed invention. See Office Action, page 4, item 7. Applicants disagree for the following reasons. First, since

Masuda does not disclose an inorganic layer, as discussed above, Masuda does not disclose the claimed controlled variation in thickness of an inorganic layer.

Second, for the polyester layer of Masuda, Masuda discloses a thickness range of the layer and deviations therefrom measured along the width of the layer. See, e.g., col. 8, lines 22-26; col. 10, lines 65-67; Table 1. Masuda discloses that the deviations are measured after production of the layer. See, e.g., col. 10, lines 60-64. Masuda neither teaches nor suggests that the deviations can be controlled during production of the layer or that the deviations are controlled along both the length and width of the layer. Whereas, Applicants' claimed inorganic layer has a *controlled* variation in thickness along *both* length and width of the film.

The deficiencies of Masuda are not corrected by Kobayashi because Kobayashi also does not disclose an inorganic layer or controlled variation in thickness thereof, as in Applicants' claimed invention. Hence, their combination would also fail to do so.

Moreover, Applicants have discovered that the claimed inorganic layer on a surface of a plastic film provides improved film flexibility and gas barrier properties. See, e.g., specification, page 4, lines 3-7.

For at least the above reasons, claims 1-3 and 21-23 are patentable over Masuda in view of Kobayashi. Withdrawal of the rejections is therefore requested.

**CONCLUSION**

It is respectfully submitted that the present application is now in condition for allowance, which action is respectfully requested.

The Examiner is invited to contact Applicants' representative to discuss any issue that would expedite allowance of the subject application.

The Commissioner is authorized to charge any required fees or to credit any overpayment to Kenyon & Kenyon's Deposit Account No. 11-0600.

Respectfully submitted,  
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Dated: May 14, 2007

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